

**CALIFORNIA INSTITUTE OF TECHNOLOGY
JET PROPULSION LABORATORY
SPECIAL CONDITIONS
FIXED-PRICE CONSTRUCTION CONTRACT FOR PERFORMANCE
AT THE GOLDSTONE DEEP SPACE COMMUNICATIONS COMPLEX**

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SC-1. SECURITY AND SAFETY

(a) Identification and Control of Personnel.

- (1) General. The Contractor shall comply with all federal, state, county, and local, codes, safety orders, laws, and regulations. The following conditions are for the protection of the Contractor, subcontractors, and their personnel performing construction work on the Goldstone Deep Space Communications Complex (GDSCC) premises. It is mandatory that the procedures and regulations be followed. The enforcement of these rules shall be the responsibility of the Contractor, and in case of any questions as to the rules, regulations, or security procedures, the Contractor shall contact the Security and/or Safety Office of GDSCC. A preconstruction safety orientation meeting will be held prior to start of construction. This meeting shall take place early enough to give the Contractor and/or safety person the time to resolve problems and to gain interpretations of orders if necessary. The Contractor shall demonstrate by rehearsal or trial run of any potentially dangerous work to be performed. The General Contractor is responsible for carrying out an effective prescribed safety program. The following additional environmental protection regulations and procedures are for the protection of the environment, Contractor, subcontractors, and their personnel performing construction work on GDSCC premises. It is mandatory that the procedures and regulations be followed. The enforcement of these rules shall be the responsibility of the Contractor, and in case of any questions as to the rules, regulations, or security procedures, the Contractor shall contact the Safety Officer of GDSCC. Safety inspections will be made by the GDSCC Safety Office. The Goldstone Complex Manager is responsible for Complex safety and by means of the GDSCC Safety Office enforces the safety rules applicable to the construction activity. Eminent danger situations will result in a stop work order by the GDSCC Manager.
- (2) Regulation of Personnel. Normal access to GDSCC is through Fort Irwin. The Contractor shall obtain copies of regulations governing the movements, conduct, and control of personnel from GDSCC. The Contractor and its personnel shall abide by these regulations. The Contractor is reminded that violation of regulations is cause for prohibiting re-entry to Fort Irwin and GDSCC.
- (3) Identification and Escort. In addition to any other requirement of the Contract General Provisions regarding badges and passes, it shall be the responsibility of the Contractor to provide all Contractor and subcontractor personnel, and all personnel delivering materials under his/her supervision, with an identification badge displaying the company name of the Contractor. All Contractor and subcontractor personnel must wear their identification badges at any time they enter the station sites. With the exception of certain key Contractor and subcontractor personnel cleared by the Goldstone Security Office, all Contractor personnel must be escorted at all times by GDSCC-authorized persons when entering "Off Limits" areas. Compliance with the GDSCC vehicle and personnel control document is mandatory.

- (4) Union Representatives. All Contractors and subcontractors working on the site who are visited by labor or union representatives are reminded that the following procedures will apply:
 - (A) The main guard facility personnel will ascertain the purpose of the visit, the name of the individual, union represented, whom he/she wishes to see, and the station at which the work is being performed.
 - (B) The main guard facility personnel will give this information to the Goldstone Complex Manager or designated alternate.
 - (C) The Goldstone Complex Manager will in turn advise the appropriate station supervisor that a union representative is authorized to visit his/her station.
 - (D) The station supervisor will advise the station guard facility, the Contractor representative, and the Designated GDSCC Project Technical Representative. He/she will also arrange for escort of the union representative by the Contractor's superintendent or the Designated GDSCC Project Technical Representative, or both.
 - (E) Access by the union representative is to be confined to that area necessary to service union members of the particular Contractor stated in the visitation request.
- (5) Aliens. It will be the responsibility of all Contractors to ascertain that Contractor and/or subcontractor personnel under their supervision are United States citizens or are in the status of immigrant aliens prior to their entry to GDSCC facilities. Foreign nationals are not permitted to work on premises without special permission by the Department of Defense.

(b) General Facilities for Personnel.

- (1) No lodging of any kind is available on site. No form of temporary housing may be established within the boundaries of GDSCC at Fort Irwin.
- (2) Such food and beverage facilities that the Contractor wishes to be available for its personnel shall be provided by the Contractor, with GDSCC approval, within the assigned work areas. No beverages containing alcohol may be introduced onto GDSCC or Fort Irwin at any time.
- (3) Emergency first aid, ambulance, and medical services are available at Fort Irwin by dialing the Echo Communications Center emergency number 333 and asking for this assistance.
- (4) All of the facilities for support, comfort, or convenience of GDSCC personnel at the sites are strictly "off limits" to Contractor personnel. The Contractor shall provide temporary chemical toilet facilities for its personnel at the location directed by GDSCC. Such facilities shall be kept in an orderly and sanitary condition at all times, and at the completion of the work, structures shall be removed.
- (5) Goldstone Cafeteria may be available to Contractors.
- (6) Telephone service will be made available to the Contractor by GDSCC from existing facilities. All calls shall be made on a charge or collect basis by the Contractor at no expense or inconvenience to GDSCC.

(c) "Off-Limits" Areas. All buildings and work areas other than those specifically assigned to the Contractor shall be considered "Off-Limits" to all Contractor personnel.

(d) Vehicles.

- (1) Parking Areas. Contractor's and workers' vehicles must be parked only in areas designated by GDSCC. All other areas and roadways must be kept clear at all times for normal operations.
- (2) Wheel Blocks for Vehicles. All Contractor vehicles except passenger cars and station wagons shall be provided with wheel blocks to prevent unattended vehicles from rolling. It shall be the Contractor's responsibility to instruct all of its employees and subcontractors of this requirement.

(3) Mechanical Equipment Back-Up Alarms. Haulage equipment, including trucks with body capacities of 2-1/2 cubic yards, or more, used to haul dirt, rock, concrete, or other construction material, and self-propelled construction equipment such as graders, which are operated on the project, whether moving alone or in combination, shall be equipped with an independent signal alarm which will sound automatically when the equipment moves in reverse. The alarm may be continuous or intermittent and shall be audible for a distance of 200 feet, irrespective of the conditions and circumstances under which the equipment is being operated. Alarms will operate upon initial backward movement, and if intermittent, shall sound at intervals not to exceed three seconds during the entire period the equipment is traveling in reverse. Compliance with these provisions by subcontractors shall be the responsibility of the contractor.

(4) Traffic. The Contractor shall cooperate in scheduling ingress and egress travel to and from the construction area to minimize traffic congestion.

(e) Fire or Emergency.

(1) Contractors and subcontractors working on buildings which are under the jurisdiction of GDSCC will, in the event of fire or an emergency, call the Echo Communications Center emergency number 333 for assistance of the GDSCC Emergency Response Team and/or Fort Irwin. In the event of a fire, Contractor personnel will utilize whatever appropriate equipment is immediately available to contain the fire until assistance arrives.

(2) In the event a fire occurs during off-hours or in the Contractor's absence in an area where remodeling or new construction is being performed by a Contractor, or in a building still under construction, the Fire Protection personnel (GUARD) will immediately attempt to extinguish the fire. However, the Contractor will be notified of the situation as soon as possible.

(3) If it becomes necessary to evacuate workmen from an area due to any emergency other than fire, the public address system will give directions for partial or total evacuation, depending upon conditions at the time. In the case of fire, the Contractor may evacuate at any time or upon orders of the senior GDSCC member at the scene.

(4) Contractors and subcontractors will furnish their own fire extinguishing equipment in sufficient quantity and of appropriate type to cover the class of hazard involved (i.e., welding blankets, fire hose, adapters, nozzles, and hydrant wrenches).

(5) Contractors and subcontractors who, in the performance of their contract, have a need for grinding, welding, cutting torch operation, burning of any type, or other work to be performed by flame- or spark-producing equipment, shall, prior to starting the operation, notify the designated GDSCC Project Resident Inspector, who will arrange for any necessary "hot work equipment" permit from the GDSCC Safety Office. The craftsmen are to be accompanied by a standby observer provided by the Contractor, who will immediately extinguish any splatter or combustion with suitable portable equipment, and who shall remain for at least one-half hour after completion of the "hot" work.

(6) Contractors, subcontractors, and their personnel will keep a clean area. Accumulations of combustible material shall be hauled away. No accumulations of combustible material will be left over the weekends or extended holiday periods.

(7) No tar kettle may be operated unless it is continually manned, has an operating heat indicator or gauge, and has a hand fire extinguisher nearby. The tar kettle must be placed at a safe distance from a hazardous area or other combustible materials.

(8) All flammable fluids in drums shall be stored in a safe area, and all drums must be grounded. This area must be posted with proper signs, such as "No Smoking," etc. Dispensing of flammable and combustible liquids shall be from approved pumps or safety vessels.

(9) Trenching and ground opening work shall be done in accordance with current OSHA codes.

(f) Explosives and Weapons.

(1) Any explosives directly related to the Contract are permitted at GDSCC only when stored and transported in accordance with Army Material Command Munitions Handling Instructions. The GDSCC Safety Office will receive notification of the intent to move explosives on to the Fort Irwin Reservation for use at GDSCC 24 hours in advance of the movement. Appropriate safety instructions will be issued to the Contractor at this time.

(2) The introduction of weapons by Contractor personnel on to the GDSCC is not permitted.

(g) Mechanical Equipment, Tools, and Rigging Gear.

- (1) Mechanical equipment requiring a current certification and/or inspection (cranes) will be checked upon arrival at the job. Inspections designated to be performed by the operator on a daily and monthly basis will be checked by the GDSCC Safety Engineer. Non-compliance with the OSHA order or lack of corrective action on deficiencies are grounds for rejection from use.
- (2) Tools and rigging gear will be checked daily for serviceability, and in addition, rigging gear will be checked before each use.

(h) Protection of Material and Work.

- (1) It is the responsibility of the Contractor to enclose hazardous work areas with temporary fencing or barricading, subject to approval of GDSCC, adequate to ensure the safety of all personnel.
- (2) The Contractor shall at all times protect and preserve all materials, supplies and equipment of every description (including property which may be Government owned) and all work performed. The protection must be substantial and so placed as to be easily removed for inspection or to facilitate the progress of other work. All reasonable requests of GDSCC to enclose or specially protect such property shall be complied with. If, as determined by GDSCC, material, equipment, supplies and work performed are not adequately protected by the Contractor, such property may be protected by GDSCC, and the cost thereof may be either charged to or deducted from any payment due the Contractor.

- (i) Incident and Accident Reporting. The Contractor shall immediately notify and promptly report to the GDSCC Safety Office any incident, accident, or exposure resulting in fatality, disabling occupational injury or occupational disease, contamination of property or environment. The Contractor shall investigate all work-related incidents or accidents to persons or property occurring on GDSCC premises to the extent necessary to positively conclude what cause or causes resulted in the incident or accident and furnish the GDSCC Safety Office with a report in such form as GDSCC may require of the investigative findings together with proposed and/or completed corrective action.

(j) Site Safety Meetings.

- (1) The Contractor shall have a daily "tailgate type" safety meeting, for the purpose of reviewing pertinent safety activities.
- (2) The General Contractor's safety representative shall conduct the daily safety meetings. Also in attendance will be the safety representative from each subcontractor and the appointed GDSCC Safety Officer.
- (3) Agenda shall include forecast of that day's activities and review of applicable safety implications. Condition of mechanical equipment, hand tools, safety devices and precautions shall be on the daily agenda. Emphasis should be placed on the construction schedule and activities requiring special safety preparations, monitoring and foresight. Serviceability of construction equipment for safety certification should be reviewed. Discussions of potentially critical and dangerous activities should include consideration for preview-rehearsal to expose all required safety precautions.
- (4) Minutes of daily meetings shall be available for GDSCC review and include agenda detail and list of attendees.

SC-2. NIGHT OPERATIONS

Unless otherwise provided in the Contract, no jobsite work shall be performed during night hours without prior notification to GDSCC. Notification shall be not less than 24 hours, for Monday through Friday. Normal GDSCC duty hours are 7:30 a.m. to 4:30 p.m.

SC-3. AS-BUILT DRAWINGS

The Contractor shall, within 15 days after completion of construction, provide JPL with one set of marked-up prints showing clearly and neatly in red ink all changes, corrections, and additions made during the construction period. Such features shall be recorded and kept up-to-date on a complete as-built record set of drawings which shall be corrected daily and show every change from the Contract drawings and specifications and the exact as-built location, size, and kind of every valve, fixture, wire, conduit, etc. GDSCC will supply one set of prints to be maintained continuously on the site by the Contractor. The set of record as-built information shall be subject to inspection by JPL at any time.

SC-4. SHOP DRAWINGS, EQUIPMENT LISTS, AND MATERIAL SAMPLES

(a) General.

- (1) The Contractor shall submit to JPL, or such person or firm as directed by GDSCC, for approval, all shop drawings, equipment lists, and material samples required under the various headings of the technical specifications. Drawings and lists shall be complete and shall contain all required detailed information. When approved by GDSCC, each copy of the drawings or lists will be identified as having received such approval by being so stamped and dated. The Contractor shall make any corrections required by JPL. Unless otherwise specified in the specifications, the number of copies to be submitted shall be as stated herein. Each shop drawing, equipment list, and material sample shall be identified with the following information as applicable:

Contract Number	Manufacturer's Name
Project Location	Specification Paragraph
Subcontractor's Name	Drawing Series Number
Supplier's Name	

- (2) GDSCC approval of such submittals shall not be construed as a complete check but will indicate only that the general method of construction and detailing is satisfactory. Approval of such submittals shall not relieve the Contractor of the responsibility for any error or omission which may exist. The Contractor shall be responsible for the dimensions and design of adequate corrections, details, and satisfactory construction of all work.

- (b) Shop Drawings. Six copies of all shop drawings shall be submitted. Four sets of these shop drawings will be reviewed by GDSCC and two sets will be returned to the Contractor. Shop drawings for submittal shall be either blueline or blackline print on white background. Blue prints are not acceptable.

- (c) Equipment Lists. Four copies of equipment and materials lists shall be submitted within 14 days after receipt of written Notice to Proceed. With the four copies of the equipment lists, the Contractor shall submit two sets of the brochures and technical data for each piece of equipment to be supplied. Brochures and technical data shall include catalogs, operating instructions, cuts, diagram and such other descriptive data as will give a complete description of the equipment, including manufacturer's name, trade name, model number, type, size, rating, and auxiliary equipment.

- (d) Material Samples. Samples shall be submitted in the quantities delineated in the technical specifications, in a timely manner, for GDSCC approval.

- (e) Proofs of Compliance. Submit proofs of compliance as follows: Provide certification that all material and equipment proposed for use in the project meet or exceed the specifications.

SC-5. OPERATION AND MAINTENANCE MANUALS

- (a) Bound Manuals. Within ten calendar days prior to completion of construction, the Contractor shall provide five complete sets of Operation and Maintenance Manuals. Each set shall be permanently bound and shall have a hard cover. The following identification shall be inscribed on the covers: "OPERATION AND MAINTENANCE MANUALS," the title, number and site location of the building, the name of the Contractor, and the Contract number. The sheets in the manual shall be approximately 8-1/2 x 11 inches, with large sheets of drawings folded in. Each complete bound manual shall be organized to provide the following:

- (1) Table of Contents.
- (2) A page indicating Contractor's name, address, telephone number, and the name of the person to be contacted regarding building and equipment maintenance.
- (3) Dividers with tab indexes indicating the various sections, such as:
- (A) Heating, ventilating, and air conditioning equipment.
 - (B) Plumbing equipment.
 - (C) Electrical equipment.
 - (D) Special equipment.

- (4) A sheet at the front of each section indicating the appropriate Contractor/subcontractor name, address, telephone number and name of the person to be contacted at the office of the installer and the major suppliers under the Contract.
- (5) An index listing of quantities and materials at each major sub-section tab divider.
- (b) Manual Requirements. The manual shall describe each system installed and shall be in sufficient detail to permit JPL operating personnel to understand, operate, and maintain all equipment. The manual shall include compilations of instruction manuals furnished by the equipment manufacturers. These instruction manuals shall include complete operation, maintenance, inspection, and repair instructions for each end item of equipment specified under various headings of the specifications. Each complete manual shall contain the following information:
 - (1) Catalog data for each piece of equipment.
 - (2) Operating and maintenance instructions (including lubrication) for each piece of equipment.
 - (3) Manufacturer's bulletins, cuts, and descriptive data.
 - (4) Complete nameplate data.
 - (5) List of all bolt and sheave sizes.
 - (6) Performance data (curves, charts, etc.) on all pumps, air handling equipment, and motor ratings and electrical signal lines and wiring diagrams for motor control centers, and major power circuit breaker and disconnect centers.
 - (7) Complete "as-built" air conditioning controls diagram and written operating procedure with catalog literature describing each control instrument.
 - (8) Complete and detailed "as-measured" balance log for the air conditioning system identified by the company doing the balance work, its address and telephone number, and the signature of the air balance engineer who performed the work.
 - (9) Spare parts data for each piece of equipment containing the following information:
 - (A) Recommended quantity of parts required for one year of operation.
 - (B) Complete parts list of all replaceable items.
 - (C) Drawing number and shop drawings.
 - (D) Part equipment code number.
 - (E) Unit price of each item.
 - (F) Name, address, and phone number of supplier.
 - (G) Such remarks and data as the manufacturer may consider pertinent.
- (c) Framed Instructions. Approved wiring and control diagrams, and valve charts, framed under glass shall be posted in locations designated by GDSCC. Proposed diagrams, instructions, and other sheets shall be submitted for approval prior to posting.

SC-6. ADDITIONAL WARRANTIES/GUARANTEES

"Guarantees" delineated in the project specifications are supplemental to the applicable General Provision entitled "Warranty" or "Warranty of Construction." Such "Guarantees" shall be in writing and shall be submitted to GDSCC by the Contractor within 15 days after completion of construction.

SC-7. SAFETY AND HEALTH PLAN - GENERAL

- (a) The Contractor shall take all reasonable safety and health measures in performance of its Contract work and shall submit a safety and health plan for JPL-DSN Safety Office approval prior to the start of any Contract work. This plan shall include, but not be limited to, the applicable safety topics suggested in Attachment 3, "Safety Plan Suggested Topics." The Contractor is subject to all applicable federal, state, county, and local laws, regulations, ordinances, codes, and orders relating to safety, environmental protection, and health in effect on the date of this Contract.
- (b) This specification supplements and implements the provisions of the General Provision of this Contract entitled "Safety and Health."
- (c) The Contractor shall take or cause to be taken such other safety, environmental protection, and health measures as GDSCC shall direct. To the extent that the Contractor may be entitled to an equitable adjustment, such adjustment shall be determined under "changes" as provided in the Contract.
- (d) Authorized GDSCC representatives shall have access to and the right to examine the sites and areas where work under this Contract is being performed to determine the adequacy of the Contractor's Safety and Health Program.

SC-8. SAFETY AND HEALTH - HAZARDOUS MATERIALS - ASBESTOS

- (a) Contractor acknowledges receipt of the attached "Asbestos Notification (Goldstone)," form JPL 2884, identifying JPL buildings containing asbestos, and agrees to distribute the Notice to all its personnel prior to their commencing work in such buildings. Contractor agrees to coordinate with the JPL Occupational Safety Office for special asbestos handling instructions to be given to all Contractor personnel prior to their commencing work, if any, which could disturb asbestos in JPL controlled buildings.
- (b) This specification supplements and implements the Provisions of the General Provision of this Contract entitled "Safety and Health."
 - (1) Environmental Matters. The following environmental controls shall apply to asbestos abatement or asbestos work:
 - (A) Asbestos Work Experience Documentation. The Contractor or specialty subcontractor for performance of any asbestos abatement work shall be registered as an asbestos abatement Contractor with the California Division of Occupational Safety and Health. The Contractor/subcontractor shall submit documentation as required by JPL to prove the following:
 - (i) Minimum of one year experience as a contractor in this specialized field.
 - (ii) Successful completion of a minimum of three asbestos abatement projects of similar size and scope or larger. This data shall include the following:
 - a. Name of contracting agency or firm.
 - b. Location of work site.
 - c. Name of Contracting Representative.
 - d. Description of work.
 - e. Results of air monitoring before, during and after work.
 - (iii) A record of any citations issued by federal, state, or local regulatory agencies relating to asbestos abatement activity, including projects, dates, and resolutions.
 - (iv) Situations in which an asbestos-related contract has been terminated, including projects, dates and reasons for terminations.
 - (v) A listing of any asbestos-related legal proceedings/claims in which the Contractor or any of its personnel have participated or are currently involved in, including descriptions of role, issue, and resolution to date.
 - (B) Worker Qualifications. Contractor and subcontractors shall at all times enforce strict discipline and good order among their employees and shall not employ on work any unfit person or anyone not skilled in work assigned to such person.
 - (i) Worker Training and Medical Qualifications. All asbestos workers shall be trained and medically certified in accordance with the requirements of General Industry Safety Order 5208.

- (ii) Worker Certification Form. The Contractor shall be prepared to provide to JPL at least 72 hours prior to beginning of work a list of all qualified asbestos workers to be employed in actual asbestos removal/asbestos work and for each asbestos worker the Contractor shall have completed form JPL 2887, "Worker Qualification," an attached copy of which forms part of these Contract documents.

(c) Illness, Incident, and Injury Experience Reports.

- (1) Reports required by this specification, or the "Safety and Health" General Provision of this Contract, shall be furnished in three copies.
- (2) The Contractor shall furnish such other reports as GDSCC determines to be related to the Contractor's Safety and Health program and its experience thereunder arising out of work performed under this Contract.

(d) Hazardous Materials.

(1) General.

- (A) The California Chemical Hazardous Communication Regulation is designed to ensure that hazardous substances produced by manufacturers are evaluated and the information concerning these hazards is transmitted to all affected employers and employees.
- (B) Presented in Section 5194 (e)(1)(c) of the Hazard Communication Standard are specific requirements related to Contractor personnel. Contractor personnel must be informed by a GDSCC representative of hazardous substances to which their personnel may be exposed while performing their work at GDSCC and the appropriate protective measures. Contractors are also required to provide a list of chemicals being used on the job site and the complete Material Safety Data Sheet (MSDS) for each chemical. The safe storage, use, application, and complete removal of the products shall be the responsibility of the Contractor.
- (C) Prior to a Contractor performing work at GDSCC, a pre-construction safety meeting is required to discuss all aspects of safety. The Facilities Section personnel are responsible for scheduling and providing written notification to the Safety Office prior to the initiation of Contractor activities. A representative of the Safety Office will be responsible for addressing specific safety-related concerns.

(2) GDSCC will inform the Contractor of:

- (A) Applicable regulatory requirements which the Contractor will be required to follow while performing work.
- (B) Any hazardous agents that the Contractor and their personnel may be exposed to while working at specific job sites at GDSCC.
- (C) Specific JPL rules, regulations, policies, and procedures which must be complied with while working at GDSCC.

(3) Contractors are:

- (A) Responsible for providing protective equipment which will be required during the operation.
- (B) Required to submit a list of all chemicals and complete MSDSs for all products used during the course of work at GDSCC. The safe storage, use, application, and removal of the products shall be the responsibility of the Contractor. If special storage is required, notification to the Safety Office prior to delivery of the material to the job site is required.
- (C) Responsible for discussing Safety and Health Special Conditions and General Provisions with all employees performing work at GDSCC.
- (D) The Contractor shall immediately notify and promptly report to JPL any accident or incident or exposure resulting in fatality, disabling occupational injury or occupational disease, any chemical release or potential release which threatens or impacts human health or the environment.

SC-9. DUST CONTROL

The Contractor shall abate dust nuisance during the construction period by frequent applications of water as directed by GDSCC. GDSCC experience indicates that during dry weather the construction areas may require as many as four wettings each per day to attain the required degree of control.

SC-10. EXCAVATION PERMIT

In addition to any other Contractor requirements regarding permits, the Contractor shall also obtain an Excavation Permit from the GDSCC Safety Office prior to any digging within the boundaries of the GDSCC Facility.

SC-11. WELDING, CUTTING, OR OPEN FLAME WORK PERMIT

In addition to any other Contractor requirements regarding permits, the Contractor shall also obtain a Welding, Cutting, or Open Fire Work Permit from the GDSCC Safety Office prior to any welding, cutting, or open flame work within the boundaries of the GDSCC Facility.

SC-12. WORKING HOURS AND SPECIAL WORKDAYS

- (a) The Contract price is based on working whatever schedule may be necessary to complete the work within the prescribed time.
- (b) No construction work shall be performed on Saturdays, Sundays, or legal holidays recognized by GDSCC without prior approval from GDSCC.
- (c) Holidays recognized by GDSCC are listed as follows: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. In addition, the Contractor shall be notified of any floating holidays. GDSCC will make known any special dates due to tracking schedule commitments.

SC-13. SPECIAL REQUIREMENTS

- (a) All tie-ins, modification, or moving of GDSCC utilities, such as power, water, air conditioning systems, etc., must be scheduled through GDSCC.
- (b) The Contractor shall submit schedules to GDSCC, at least 72 hours in advance, of any utility outages and off-hour work. GDSCC will inform the Contractor within 24 hours of approval or disapproval of such schedules.

SC-14. TEMPORARY UTILITIES

- (a) Water. Drinking water may be drawn from any external spigot. The Contractor shall provide suitable containers. Ice is not available. All temporary corrections and facilities are to be provided by the Contractor and removed by it at the completion of the work.
- (b) Electricity. All reasonable electric current (120-208 volt) required by the Contractor may be furnished by GDSCC from existing facilities. All temporary connections for electricity in remote areas shall be provided by the Contractor.

ASBESTOS NOTIFICATION (GOLDSTONE)

The Jet Propulsion Laboratory is committed to providing a safe and healthy work environment for all personnel.

In the past several years, the Laboratory management, working through the Goldstone Deep Space Communications Complex (GDSCC) Safety Office, has had an on-going program of asbestos identification and control. This program has included air monitoring and training for members of the Facilities and Maintenance staff.

Most of the asbestos located at GDSCC is in restricted access areas such as mechanical rooms, boiler rooms, and attics. It is in good condition and does not pose any hazard during normal operations.

The GDSCC Safety Office staff has taken numerous air samples in these buildings. Visual inspections and air samples indicate that airborne asbestos levels in the buildings are much lower than those in industrial workplaces where serious adverse health effects have been observed. Levels in the buildings are not significantly different from levels outside.

Asbestos-containing materials pose no threat to your health unless the fibers become airborne. Any contractor maintenance/construction/renovation activity involving intentional or accidental contact with friable materials can release fibers. Therefore, it is important not to disturb the asbestos materials.

General written procedures and handling restrictions necessary to prevent disturbance have been developed for GDSCC and contractor personnel. Only authorized and properly trained personnel should perform any work which may disturb asbestos materials. All contractor operations performed in areas where asbestos is present must be reviewed by the GDSCC Safety Office prior to initiation of activities.

Pursuant to the California Health and Safety Code (Chapter 10.4, Section 25915), each employee has the right to review **all** reports about surveys, bulk sampling and air sampling.

If you have questions regarding operational procedures for contractor activities, contact the GDSCC Safety Office at ext. 166-330.

WORKER QUALIFICATION

This form is to be supplied for each worker classified as an "Asbestos Worker," including "Apprentice Grade," for purposes of prevailing wage laws. It is also necessary for each "Foreman," "Supervisor" or other lead classification. This form need not be supplied for personnel engaged solely in work incidental to the asbestos removal, such as setup, material and equipment moving, and post-removal cleanup.

Employee Name: _____

Residence: _____

Social Security Number: _____

Date of Most Recent Training: _____

Date of Most Recent Physical Under 5208: _____

Date of Most Recent Respirator Fit Test: _____

Experience in Asbestos Abatement: _____

LOCATION

TYPE OF WORK

1. _____

2. _____

3. _____

I hereby certify that I have the training and experience as listed above:

Employee's Signature

Date

I have verified this information and present this employee as "qualified":

Contractor's Signature

Date

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADDITIONAL COPIES OF THIS FORM

SAFETY PLAN SUGGESTED TOPICS

1. Inspections - Right of Entry.

(The JPL Deep Space Network (DSN) Program Office Safety Manager or designated representative(s) have a right of entry at any time to any job site or location at the Goldstone Deep Space Communications Complex (GDSCC) or any other location where DSN work is being conducted.)

2. General Safety and Health Provisions.

a. Contractor Requirements.

(In contracts for construction, alteration, and/or repair, including painting and decorating, no contractor or subcontractor of any part of the contract work may require any laborer or mechanic employed in contract performance to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to health and safety.)

b. Accident Prevention Responsibilities.

(1) Conduct Inspections.

(Contractors and subcontractors are responsible for initiating and maintaining such programs as may be necessary for accident prevention. Such programs must provide for frequent and regular inspections of the job site, materials, and equipment by designated, competent persons.)

(2) Mitigate Unsafe Conditions.

(Use of any machinery, tool, material, or equipment which is not in compliance with applicable requirements is prohibited. Such machine, tool, material, or equipment must either be identified as unsafe by tagging or locking the controls to render them inoperable or be physically removed from its place of operation.)

(3) Have Qualified Operators.

(Only those personnel qualified by training or experience to operate equipment and machinery may be permitted to do so.)

3. Safety Training and Education.

(Contractor and subcontractor personnel and workers employed in contract performance must be educated and trained in recognizing, avoiding and preventing unsafe conditions and acts applicable to his/her work environment to control or eliminate any hazards or other exposure to illness or injury. For example:

- ◆ *Personnel required to handle or use poisons, caustics, and other harmful substances must be instructed regarding safe handling and use, and be made aware of the potential hazards.*
- ◆ *Personnel required to handle or use flammable liquids, gases, or toxic materials must be instructed in the safe handling and use of these materials and be made aware of the specific requirements for occupational health and environmental controls, and fire protection and prevention.*

- ◆ *Personnel required to enter into confined or enclosed space must be instructed as to the nature of the hazard involved, the necessary precautions to be taken, and in the use of required protective and emergency equipment. Confined or enclosed space is generally considered to be any space having a limited means of egress which is subject to accumulation of toxic or flammable contaminants or has an oxygen-deficient atmosphere. These spaces include storage tanks, process vessels, bins, boilers, ventilation or exhaust ducts, sewers, underground utility vaults, tunnels, pipelines, and open-top spaces more than four feet deep, such as pits, tubs, vaults and vessels.)*

4. Record Keeping.

5. First Aid, Medical Attention, Medical Service, and Recording and Reporting of Injuries.

6. Fire Protection and Prevention.

7. Housekeeping.

(Includes waste disposal.)

8. Illumination.

9. Sanitation.

10. Personal Protective Equipment.

(Examples are foot protection, hearing protection, eye and face protection, head protection, gloves, respiratory protection, safety belts, lifelines and lanyards, safety nets, electrical protective devices, etc.)

11. Acceptable Certification for Machinery, Tools, Equipment and Materials.

12. Emergency Action Plans, Including Means of Egress in Case of Fire or Other Emergencies.

(This includes posting the name and location of the nearest medical facilities.)

13. Radiation Protection.

(Examples are ionizing, nonionizing, lasers, etc.)

14. Occupational Health and Environmental Controls.

(Examples are gases, vapors, fumes, dusts, mists, asbestos, and toxic, hazardous and flammable substances, spray booths, waste operations, etc.).

15. Signs, Signals and Barricades.

(Examples are traffic control, security, protection of endangered species, etc.)

16. Materials Handling, Storage, Use, and Disposal.

(Materials Handling includes rigging, sling/wire ropes, cranes, derricks, helicopters, hoists, elevators, conveyors and air lifts.)

17. Tools.

(Includes hand and power tools.)

18. Welding, Cutting, Brazing and Soldering.

19. Electrical.

(Includes power transmission and distribution, approach distances to exposed energized power lines and parts, cable reels, cable fault locating and testing, and open wires).

20. Walking and Working Surfaces, Floor and Wall Openings, Means of Egress, Stairs and Ladders, and Scaffolding.

(Floor and wall openings include guardrails, handrails, and covers.)

21. Motor Vehicles, Rollover Protective Structures, Power Platforms, Manlifts and Mechanized Equipment Operations.

22. Excavations.

23. Concrete and Masonry Construction.

24. Steel Erection.

25. Underground Construction.

26. Demolition.

27. Blasting and Use of Explosives.

28. Temporary Labor Camps.

29. Lockout/Tagout.

(Control of hazardous energy.)

30. Compressed Gas and Air Equipment.

31. Machinery and Machine Guarding.

32. Battery Handling.

33. Support Structures.

34. Personal Climbing Equipment.

35. Portable Power Equipment, Lights, Tools, Appliances and Heaters.

36. Pollution Control and Hazardous Material Spill Containment and Clean-Up Plan.

37. Hazardous Communications.